

Growing the Next Generation of Scientists and Engineers



Presented by:

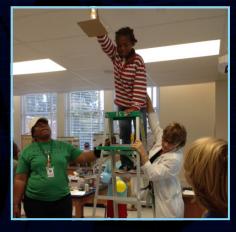
Sharon Hanley Disher

DIRECTOR

Young Engineers and Scientists of MD, LLC.

JUNE 20 11 a.m.

In the Junker Center





Office of Naval Research

875 N. Randolph St., Arlington, Virginia Bobby Junker Executive Conference Center, 14th Floor

Growing the Next Generation of Scientists and Engineers

Sharon Hanley Disher, one of the first women graduates from the United States Naval Academy, served her country for 10 years as a Civil Engineer Corps naval officer from 1980 to 1990. As a mother of three Naval Academy graduates, two of whom are engineers, her current passion is growing the next generation of scientists and engineers for our nation's workforce.

Mrs. Disher believes that we must plant this seed of opportunity in the minds of our youngest citizens and create a pipeline of fun, hands-on STEM curricula to keep them excited about becoming engineers and scientists. Her curricula begin at the kindergarten level and continue through eighth grade.

Additionally, she believes that children must be taught challenging and rigorous science at an early age. Therefore, her curriculum introduces subjects such as the Periodic Table of Elements, exothermic and endothermic chemical reactions, and positive, negative and neutral buoyancy to kindergarteners through fourth graders. Actual scientific terminology is used in her lessons. Subjects introduced in her curriculum become harder and more complex as the grade levels increase.

She also incorporates reading in her STEM lessons, having written numerous science storybooks such as "Adam the Atom," "Molly Molecule," "Henry the Helium Balloon" and "Snowden the Snowman—Exploring Endothermic Reactions."

Mrs. Disher's time at the Naval Academy studying systems engineering, as well as her service in the Navy as a civil engineer, helped shape her current pursuits of STEM education and outreach specifically to underserved communities.

Sharon Hanley Disher

Sharon Hanley Disher graduated from the United States Naval Academy in 1980 in the first class with women and men, and was the first woman to graduate from the Naval Academy with a Bachelor of Science degree in Systems Engineering. She served in the Navy Civil Engineer Corps for 10 years including her last tour of duty as the Officer in Charge of Construction Battalion Unit 414 in New London, Connecticut, where she was the second woman in the Navy to ever hold such a position. In 1998, Mrs. Disher published her book entitled "First Class – Women Join the Ranks at the Naval Academy," a story about the first class with both women and men at the Naval Academy. She currently is the owner of Annapolis Redesigns, LLC and founder and director of Y.E.S. – Young Engineers and Scientists of Maryland, LLC.

Mrs. Disher resides in Annapolis with her husband, Tim Disher, a retired naval submariner and the current Director of International Programs at the Naval Academy. The Disher's twins, Alison and Brett, are 2010 graduates of the Naval Academy serving in the Navy and Marine Corps, respectively. Their youngest son, Matthew, is a Naval Academy member of the Class of 2013. The Disher family is the first family whose members all attended the Naval Academy.

Today, Mrs. Disher teaches STEM at Annapolis Elementary School and other Title I schools, where she is achieving her goal of growing our nation's next engineers and scientists.